104.01 PARTNERING

Partnering promotes communication between the Idaho Transportation Department (ITD) and the Contractor, and is used to identify and promote reciprocal goals. The objectives of partnering include:

- Complete projects within budget and on schedule.
- > Increase responsiveness and timeliness of decisions.
- > Improve problem solving.
- ➤ Reduce paperwork and rework.
- ➤ Eliminate litigation.

The backbone of partnering is the development of a win-win relationship between ITD and the Contractor that discourages gain by one at the other's expense. However, partnering does not mean a waiving of contract plans and specification requirements. The majority of ITD's projects now include a voluntary partnering specification. To implement this partnering specification, ITD's Resident/Regional Engineer and the Contractor's Project Manager jointly plan a Partnering Workshop. The Partnering Workshop should be held within thirty (30) days after the Notice to Proceed and before the Preconstruction Conference.

Workshop Location and Length

The workshop should not be held at ITD's District office or the Contractor's office, but rather at a neutral location such as a local hotel conference room, or a restaurant's banquet facility. Simple projects typically require ½ a day; complex projects with many issues may require ½ to 2 days.

Workshop Attendees

All stakeholders (someone who has a vested interest in the successful completion of the project) should be invited. Attendees will vary depending upon the project, but should be the key people or the decision-makers in an organization. Possible workshop attendees include:

Contractor Project Staff Contractor Management

ITD Construction Staff
ITD Design Staff
ITD Management
Subcontractors

Suppliers Design Consultants

Government Agencies (FHWA, Forest Service, Cities, Indian Communities, Etc.)

Facilitator

The selection of the Workshop Facilitator is critical to the workshop's success. Consideration may be given to bringing in an outside facilitator on large and/or complex projects to further reinforce the "neutral ground" framework. Contact the Construction section for facilitator references.

Cost

ITD and the Contractor will equally share the cost of the partnering workshop, including renting meeting space, providing lunch or refreshments, and hiring the facilitator.

Workshop Agenda

Six major elements in a Partnering Workshop are:

- 1. **Introduce each partner**. Discuss job relationship and responsibilities.
- 2. **Develop mission statement, goals, and objectives**. Establish mutually agreed-upon goals and measurable objectives, e.g., completing the project on time or ahead of schedule, setting safety, cost, or quality goals.
- 3. Identify problems, issues, or opportunities for the project.
 - Project opportunities/alternatives -- Detour instead of staged construction could save time and costs.
 - ➤ Prioritize issues and develop action plans that define the issue, the person responsible for the solution, and the date the solution is required.
- 4. **Develop problem resolution/escalation process**. Identify authority levels, timelines for decisions, and who is responsible for what types of decisions. Define the relationship of all parties (i.e., consultant designers, other agencies, utility companies, etc.)

Problem resolution should be at the lowest level.

If no agreement can be made, immediately escalate to the next level.

No decision or ignoring the problem is not acceptable.

- 5. **Develop an evaluation process and an evaluation form.** Base the items to be evaluated on the project goals (e.g., project goal speed up the review process of shop drawings). Use a rating system of 1 (poor) to 5 (good), with space for comments. Each stakeholder should evaluate the project every thirty to sixty (30 to 60) days or as determined by the project team. The Contractor's management and ITD management should review and take corrective action, if required.
- 6. **Sign a charter** that has the mission statement and common goals (see Exhibit 104.01-1).

Monitor Progress

Hold follow-up workshops to address problem areas or issues that hinder successful performance and to reiterate the project goals and objectives. The Contractor's project staff and ITD construction staff should hold follow-up sessions on a weekly basis. The Contractor management and ITD management should meet on a monthly basis or as adjusted by partner agreement.

Remember a partnering agreement does not waive the terms of the contract nor change the plans or specifications.

PARTNERING CHARTER

for

Fairfield IC to MP 103.5 Project No. IR-84-2(35)95

We are a team dedicated to providing a quality project in accordance with the contract. We are committed to employee and public safety, environmental protection and minimizing public inconvenience, as described in the objectives listed below:

PERFORMANCE OBJECTIVES:

- Build a quality project,
- Provide a safe job site,Complete this job on time,
- Realize a reasonable profit,
- Minimize public inconvenience,
- Earn 90% of the ride specification bonus.

ADMINISTRATIVE OBJECTIVES:

- Finish this job with no claims,
- No property damage over \$1,000,
- Minimize paperwork,
- Minimize change orders.

COMMUNICATION OBJECTIVES:

- Make consistent, timely decisions at the lowest possible level,
- Work toward timely conflict resolution,Use experience and knowledge gained on this job to better design next project phase.

We, the undersigned, agree to make a good faith effort to implement the above objectives.

CONSTRUCTION Scope of Work 104.02

104.02 VARIATION IN QUANTITIES

Contract bid item quantities are estimated and subject to variation during construction. The Engineer may increase or decrease quantities as necessary to complete the project. The percentage of completion of items should be checked at each progress estimate. If it appears that an item will vary by more than 25%, then the contract unit price should be evaluated for reasonableness. If the price is not reasonable (i.e too high), the Engineer should request a price adjustment justification from the Contractor. The Contractor also has the right to request a price adjustment when quantities vary by more than 25% subject to the limitations of Subsection 104.02.

Quantity Variation – With Price or Contract Time Adjustment

If a quantity variance requires a price or contract time adjustment, a change order must be written to make the adjustment. See Section 104.03. If the Engineer and the Contractor cannot agree to a price adjustment, the Engineer may establish a price for the work or price it on a force account basis per Subsection 109.03.

Quantity Variation – Without Price Adjustment

If the Engineer determines the contract unit price is reasonable, and the Contractor has not requested a price adjustment, then work will continue at the contract unit price. Agreement to continue at the contract unit price should be agreed to by the Contractor and documented in writing. A sample form for documenting agreement to continue work at contract price or for requesting a price adjustment is shown in Figure 104.02-1. The sample form may be modified as needed by the Engineer.

ITD-2243 Quantity Variation Request (QVR)

If neither a price nor contract time adjustment is required, then a QVR (ITD-2243) shall be initiated when there is an increase or decrease <u>in any one item</u> of \$50,000 or more from the authorized amount. The QVR shall be prepared by the Engineer and sent to the District Engineer. The District Engineer must ensure that quantity variations are reported in a timely manner.

The District Engineer has final authority to approve QVRs; however, prior approval by FHWA for QVRs greater than \$100,000 on full oversight projects is required. The Construction section will obtain and document FHWA prior approval on the ITD-2243.

QVRs shall be numbered consecutively, beginning with number 1, for each contract. QVRs shall be numbered separately from change orders. The reason for the quantity variation shall be explained on the ITD-2243.

The District shall submit two original signed copies of the ITD-2243s to the Construction section. The Construction section will prepare copies and distribute appropriately. Where local units of government are involved, their approval shall be indicated on the ITD-2243.

The above \$50,000 rule also applies to new contract items established by change order. For Contract items listed as contingency amounts to be paid for by force account, no QVR is needed for overruns of the estimated amount unless it exceeds \$50,000.

FHWA Prior Approval of QVRs

On full federal oversight projects, FHWA must approve quantity variances for bid items over \$100,000. The ITD-2243 must be submitted <u>well in advance of the actual time that quantities increase</u>. The Construction section will submit the completed ITD-2243 to FHWA to obtain prior approval.

Failure to obtain advance approval will jeopardize federal-aid funding.

		FIIG
Project No.		From: Resident Engineer
Location :		Idaho Transportation Department
То:		Quantity Variance
		Excess of 125%
Item No.:		O Less than 75%
ltem : Subject : <i>Bid Quantit</i>	ty Variance	
	ess of 125% of authorized quantity. Please retunit price is warranted in accordance with s	
	Signed:	Date:
Contractor Response:	Agree to continue work on this item at contract	unit price
	☐ An adjustment to the contract unit price (plus or	minus) for this item is warranted (explain below)
Justification for price adj	ustment or continuing at contract unit price :	
, ,	,	
	Signed:	Date:

104.03 CHANGE ORDERS AND EXTRA WORK

The Engineer has the right to make changes in the work or add extra work within the general scope of the contract.

Advance approval of the ITD-02317, Record of Change Order Authorization, shall be given by the person who has been delegated the approval authority by the Chief Engineer. (See Change Order Approval Authority Table). The only signature required on an ITD-02317 is that of the approval authority.

When the Contractor proposes a change to the contract, the Contractor will complete and submit the ITD-02884, Request for Change (RFC), to justify the change along with any other information requested by the Resident Engineer.

Contractor-requested changes should be viewed in terms of a benefit to ITD and the taxpayers.

A fully executed Change Order is preferred before performing any changes and/or extra work.

Funds Availability

Prior to submitting an ITD-00400, Change Order, for execution by the proper authorities with ITD and the Contractor, the necessary funds must be available for the proposed change. Availability and the source of the money will be determined and the proper forms, transfers, etc. made prior to execution of the Change Order.

Authorization for Changes or Extra Work (ITD-02317)

Generally, the ITD-02317, Record of Change Order Authorization, is the written justification for a Change Order and falls into one of the following categories:

- Compliance with the plans or specifications is either impossible or impractical.
- A product equal to the one specified can be obtained at a savings.
- A product better than the one specified can be obtained at no additional cost.
- An increase in cost that can be justified such as an improvement in safety or aesthetics.

An ITD-02317 is prepared in the District and transmitted to the Construction section by electronic mail. Supporting documentation may be transmitted by fax or regular mail. The electronic mail shall be treated as the original. No follow-up submission of a "hard copy" is required. After the ITD-02317 has been reviewed in the Construction section, an appropriate number of copies will be made and distributed by the Construction section as necessary. Any special distribution desired by the District should be noted on the ITD-02317.

Any additional comments added to the ITD-02317 at headquarters will be included, as appropriate, on the ITD-00400 Change Order.

Processing the ITD-02317, Record of Change Order Authorization

The ITD-02317 should be completed so that the reason and necessity for the change is evident.

The District prepares the ITD-02317 for all changes originating at the District regardless of cost or nature of the change and requires prior consultation according to the approval authority table.

The Construction Section will prepare the ITD-02317 for changes originating from headquarters Sections or FHWA. Changes noted with an asterisk (*) on the Change Order Approval Authority Table shall have prior approval of FHWA on all full Federal Oversight projects. Changes marked with a plus symbol (+) shall have prior approval of the FHWA on all Federal-Aid projects. FHWA will document their prior approval on a FHWA 1365 form and provide a copy to the ITD Construction section for inclusion in the project file. The degree of federal involvement will be shown in the contract documents.

The ITD-02317 that is prepared for Minor Change Orders (MCO's) requires prior consultation and recommendation from the District Engineer and will be processed the same as any other ITD-02317 to maintain proper records.

The ITD-02317 should include the following:

- 1. A description of the work to be performed.
- 2. The materials that are to be incorporated into the work and any materials testing requirements (if applicable).
- 3. The construction requirements as to how the work is to be performed.
- 4. A method of measurement for quantifying the work that has been performed and accepted by the engineer.
- 5. Pricing, including the basis of payment stipulating how the contractor is to be paid.
- 6. Contract time accounting.

As a minimum, the above six elements shall be approved **prior** to the performance of extra work through the issuance and approval of the ITD-02317, Record of Change Order Authorization.

When changes and extra work are to be performed after substantial completion, a method of time accounting to control the duration of the work will be required to be specified in the Change Order.

Any change involving environmental aspects of the project shall be made only after obtaining approval from those having authority for the environmental document. Similarly, changes that might affect the operations of Ports of Entry (POE) should be made only after consultation with the POE Manager. The person(s) consulted with and consultation dates must be completed on the ITD-02317 to advise management that appropriate specialists have been brought into the decision-making process for the change.

If verbal approval of the ITD-02317 is obtained, the name of the individual giving verbal approval and the date of said approval should be shown in the "discussed with _____" column.

Changes or extra work must be approved prior to doing the work.

If an ITD-02317 is found to be in error or require revision, a new ITD-02317 must be prepared. The new ITD-02317 must contain a statement to the effect that it supersedes or revises the previous ITD-02317 dated ______.

Change Order (ITD-00400)

Because a Change Order modifies or supplements the contract, it must be written in a clear, concise, and explicit manner that can be readily interpreted by anyone not familiar with the work.

An ITD-00400, Change Order, is required for all changes to the contract that:

- Significantly alter the quantity of work or working methods,
- Add/subtract work (other than quantity overruns/underruns that are not significant),
- Change specifications,
- Change plans, or
- Any other item spelled out in the contract as altered by ITD.

Additional considerations as to the need for a Change Order are:

- ➤ Generally, a Change Order is not necessary if prices are already established in the contract.
- ➤ Where specifications permit the purchase of materials left on hand at invoice cost, the invoice costs will normally be considered as stipulated costs and a Change Order is not needed.
- ➤ That a Change Order is required to purchase surplus aggregate since this price will have to be negotiated (normally a NON-PARTICIPATING Change Order).

When the proper authorities have executed the Change Order, the document becomes a supplemental agreement to the contract and carries the same legal force as the original contract.

Issuance of an Avoid Verbal Order (AVO) for a Change Order

Obtaining a fully executed Change Order prior to the performance of work is desirable when changes to the contract are initiated. In the absence of a fully executed Change Order, the order given to the Contractor to proceed with the changed or extra work should be given in writing by using an Avoid Verbal Order (AVO). The order given by the Engineer must be clear and concise for the work to be performed, along with the method of measurement and basis of payment. The AVO may be hand written, provided it is legible.

When form, ITD-2055, <u>AVOID VERBAL ORDER/SPEED LETTER</u> (AVO) is used to give instructions or messages to the contractor, the following procedure should be used:

- The message is to be prepared by ITD and signed by the person representing ITD. The contractor's representative receiving the message is to also sign the AVO.
- The yellow copy remains with the contractor's representative; the Resident retains the white and pink copies. A copy of the original white copy is to be sent to the contractor's home office to ensure their management is aware of this communication.

The purpose for these instructions is to make sure the contractor officially acknowledges receipt of an AVO by requiring a signature of his representative and a "hard copy" transmitted to his main office by the Resident Engineer for documentation purposes. Claims investigations have revealed, in too many instances, that no record is available confirming the contractor received the AVO's. The contractor's representative's signature and date of receipt are very important.

The AVO must be signed by the Contractor to signify acceptance of the temporary change order.

Examples of AVOs as a "Temporary Change Order" are at the end of this section -- Example 104.03-1 and 104.03-2.

Changes to Project Documents

When hand written changes are made to project documents, for example the ITD 002317, Record of Change Order Authorization, it is important that the person who makes the change/s provide documentation of that change through an initial and date next to the change. Virtually every document we produce has the possibility of ending up as evidence in a dispute. Proper identification of the person making a change, and the date of that change are critical to our record keeping process and authenticity of the document. Also keep in mind that changes made, by ITD, to a document after signature by the contractor may present additional problems in terms of legality.

Change Order Approval Authority Table

The Change Order Approval Authority Table designates approval authority for the various types of changes.

	CHANGE ORDER APPROVAL AUTH	ORITY TABLE		
Item No	Type of Change	Approval Authority	In Consultation With	
1*	Changes in the geometry of a roadway section (including revisions involving addition, deletion, relocation, or structural design of major structures, alignment, or typical section on main roads, ramps, and frontage roads or cross roads.	Construction Engineer	Roadway Design Engineer Traffic Engineer, Bridge Engineer, Materials Engineer	
2*	Revisions in conflict with approved standards including new technologies for which no standards have been approved.	Construction Engineer	Discretionary	
3* +	Changes in approved access provisions (Interstate and NHS routes).	Construction Engineer	Deputy Attorney General Right of Way Manager, Traffic Engineer, FHWA	
4*	Change in specifications, including type or quality of materials.	Construction Engineer	Appropriate Section Manager	
5*	Claim settlements, including negotiated settlements \$25,000 \$100,000 \$500,000 \$5500,000 \$5500,000	Resident Engineer District Engineer Construction Engineer Chief Engineer	District Engineer, Claims Engineer Construction Engineer, Claims Engineer Assistant Chief Engineer (O) Discretionary	
6* +	Changes, which would result in elimination of, or delay to, environmental mitigation measures and commitments on Federal-Aid and State-funded projects covered under a FHWA-approved environmental document.	Construction Engineer	Roadway Design Engineer Environmental Manager FHWA	
7*	Changes or extra work resulting in an increase or decrease in costs exceeding \$100,000 \$500,000 \$1,000,000	Construction Engineer, Assistant Chief Engineer (O) Chief Engineer	Discretionary	
8* +	Changes in contract plans beyond the general scope and intent of the original contract.	Assistant Chief Engineer (O)	Discretionary FHWA	
9*	Extension of contract time. 0-5 days 5 days (Individual time extensions that are > than 5 days or when cumulative time extensions exceed 10 days require FHWA approval on full oversight projects.)	District Engineer Construction Engineer FHWA	Discretionary	
10	Utility and Railroad Change Orders	Construction Engineer	Utility Engineer	
11	Engineering errors.	District Engineer	Discretionary	
12	All changes and extra work not included under 1-10 above and which involve costs between (-\$100,000) to (-\$25,000) and \$25,000 to \$100,000	District Engineer	Construction Engineer	
13	Minor Change Orders (MCO's) not included under 1-12 above and which involve costs between (-\$25,000) to \$25,000.	Resident Engineer	District Engineer	
*	Requires FHWA prior approval on full feder Requires FHWA prior approval on ALL The Construction Section will obtain FHWA a	Federal-Aid Project		

Processing the ITD-00400, Change Order

The Change Order should give:

- (1) Direction to the Contractor of the work to be done or deleted (give the location and a clear description of the work to be performed under a main heading);
- (2) The method of measurement (use a secondary heading);
- (3) The basis of payment (use a secondary heading); and
- (4) Adjustment in contract time (address adjustments at the bottom of the Change Order).

Every Change Order must address cost (#3) and time (#4) even if it is a no cost Change Order.

Submit a separate Change Order for each individual change or operation and include all items of work, adjustment, changes in plans or specifications, etc. to entirely cover the new work. If the new work includes contract items at contract prices, include this information in the Change Order. Do not wait to cover these items by a Quantity Variation Request (QVR). Do not include other work items or changes that are unrelated.

For example, a condition may arise where a change in specifications on crushed aggregate is warranted and a price adjustment is needed on this item. At the same time, an unplanned pipe must be installed at a particular location and there is no contract bid price for the pipe. Both conditions require a Change Order; however, they are entirely unrelated, so each must be submitted on a separate ITD-00400.

The space for adjustment in contract time **must be filled in** on all Change Orders. The space provides for "time adjustments," not "time extensions." The contract time can be decreased as well as increased if the change warrants a decrease.

Time adjustments on all contract changes should be considered and resolved at the time the Change Order is initiated. If the change cannot be accomplished concurrently with the controlling operations, or affects the critical path, then a time adjustment should be made.

Avoid having extra work or changed work done by Force Account, if possible. Use Force Account only when the nature of the work makes it impossible to arrive at an agreed price, or when detailed records are needed, such as on potential claim issues. Justification for using Force Account must be addressed on the ITD-02317. Use a contingency amount (CA), NOT lump sum (LS) when the actual cost cannot be reasonably estimated.

Change Orders shall be numbered consecutively, beginning with number 1 for each contract. If the contract covering work involved in a previous change must be amended, a new Change Order shall be completed and assigned a new number.

The date on the face of the Change Orders will normally be the date on which the Contractor was ordered to do the work. The actual order may be given verbally to the Contractor after the authority has given approval. The date the verbal order was given to the Contractor will be the date on the face of the subsequent Change Order, ITD-00400. The date of the ITD-02317 authorizing the Change Order will be the date approval was given to the Contractor.

Change Orders for Full Federal Involvement projects that are approved by the Construction Engineer or higher authority must be submitted to the FHWA for approval (see Change Order Approval Authority Table for FHWA approval requirements). FHWA will document their prior approval on FHWA 1365 form and provide a copy to the ITD Construction Section for inclusion in the project file. The Construction Section will obtain the FHWA approval. For change orders with interim completion dates or for work to de done after the project is substantially complete, the change order must address liquidated damages.

Naming of Change Order Items

The ability to list the changes by item number(s) is imperative to track Change Order items. The item number(s) or name(s) given to Change Order item(s) must be kept uniform from project to project and residency to residency.

Change Order items that are not already provided for in the contract shall use the following numbering method. The number consists of:

- An alpha designator for the type of work.
 - C CHANGE ORDER
 - F FORCE ACCOUNT
 - N NON-PARTICIPATING
 - R ROYALTIES ITEM
 - A ADJUSTMENT PENALTIES
 - M MATERIALS ON HAND
 - SPT TRAINING
 - X DIFFERENT OR OTHER
 - U UTILITY
- A two-digit number for the Change Order number.
- The item number had the work been included in the original contract, a contract item designator, or other alphanumeric designator abbreviating the type of work to be done.

The entire coding or naming of the Change Order item cannot exceed 8 characters

Thus, a new item for Plant Mix Pavement, Class II, established by Change Order No. 9 would be designated as: Item No. C09405A2. Change Order No. 10 for adding work to dig a ditch by Force Account could be designated as: Item No. F10DIGDH or it could use other descriptors such as DITCH as long as the naming is somewhat representative of the work to be performed. (Refer to the Wincaps documentation for additional information.)

Items involved in a Change Order that have been previously established either in the original contract documents or an earlier Change Order will continue to use the previously established number, provided the unit price remains the same.

Contractor's Signature

The Contractor's original signature will be obtained on the two copies of the Change Order prior to submission to the Construction Section. In the event the Contractor does not agree to the Change Order and refuses to sign, it should be signed at the level indicated on the ITD-02317 and submitted to the Construction Section with an explanation of the Contractor's objection and the District's position. If the Change Order is unilaterally issued, it shall be given to the Contractor as an effective order. The Contractor may then file a claim if so desired. In this case, when the executed change order is mailed to the contractor, use certified mail, return receipt requested.

Local Agencies

In accordance with Section 110 of the "Guidelines for Local Public Agency Projects", and typical State/Local Agreements, the Department must obtain prior approval from the Local Public Agency (LPA) when changes made to the plans and specifications, through issuance of a change order, increases the cost of a project.

The LPA must be aware of and signatory to all change orders. When the LPA's share of any change order exceeds \$1,000, or if quantity variance exceeds this amount, the Department will collect the LPA's share of the cost prior to starting or continuing the work.

It is imperative that agreement with the contractor on the scope of work, associated costs and time adjustments be made **prior** to the performance of the extra work.

See Example 104.03-7 for an example of a State/Local construction agreement for reference.

Copies

The District will submit to the Construction Section two typed copies of the ITD-00400, Change Order, along with any attachments. The Change Orders shall contain original signatures.

Attachments should be folded to the size of the Change Order. After approval, enough additional copies will be made at headquarters for appropriate distribution.

Minor Change Orders (MCOs) shall be processed the same as other Change Orders and transmitted to the Contractor by the Construction Engineer.

Sketches and Drawings

Sketches or drawings are sometimes a necessary supplement to a Change Order and must be legible prints showing all data necessary to properly describe the work. Prints must be attached to all copies when submitted by the District. If attachments are larger than (11" x 17"), the District shall submit nine (9) copies of attachments.

Constructive Change

Any conduct by the Engineer (or a representative authorized to order changes), which is not a written Change Order, but which has the effect of requiring the Contractor to perform work different from that prescribed by the terms of the contract, could constitute a constructive Change Order. If the Contractor gives written notice that constructive change has occurred, and the Engineer agrees after evaluation, a written Change Order will be initiated and processed as any other Change Order. (ITD Standard Specifications 104.03-2)

Consultant Designs - Errors or Omissions Change Orders

Change Orders that become necessary due to design errors or omissions by consulting engineering firms should be brought to the attention of the consultant immediately (refer to section 105.02 of this manual).

If the design error or omissions result in substantially greater cost than if the plans, quantities, and/or specification had been correct at the time of bidding, restitution of the extra cost is the responsibility of the consultant.

To clarify this requirement, the following two instances are used:

Instance A: The consultant's plans failed to show guardrail on an embankment that would require protection in accordance with the Design Manual. The department and local government determine that guardrail is required and the consultant is so informed. Subsequently, since there was no guardrail in the contract, the Resident Engineer negotiates a fair and equitable price for the guardrail and a Change Order is prepared.

Instance B: The consultant's plans specify spread footing for the abutments of a small single-span bridge. Apparently, the foundation investigation was improper, as the gravel layer on which the spread footing was to be founded amounted to a very shallow layer that is unacceptable for supporting the abutments. The consultant and other department personnel are contacted. After additional investigation, it is agreed that the spread footing design must be abandoned in favor of a pile-supported foundation. Consequently, the excavations must be backfilled and compacted in preparation to driving piling. A Change Order is prepared to cover the backfilling and the design changed to piling.

The situation described in Instance A is one in which the consultant would not normally be expected to share in the construction cost. It is assumed that the negotiated price did not result in any greater total cost to the project than would have occurred had the item been included in the original plans; therefore, no assessment should be made against consultant.

The situation described in Instance B, however, is one in which additional costs were incurred to perform corrective work that was the result of a design error or omission. The extra work resulted in no benefit to the project. Therefore, the consultant is liable for the costs of excavating between the newly established abutment grade and the originally designed footing grade, as well as the backfilling and compacting of the excavation. The cost of piling should not be considered the consultant's liability.

All potential claims against engineering consultants for design errors and omissions shall be approved by the Construction Engineer prior to filing of the claim. Claims against engineering consultants should include applicable cost for re-design, for ITD personnel checking re-design, and for contractor delay. The Resident Engineer, upon approval of the Construction Engineer, shall then correspond with the consultant setting forth the basis of the claim. On locally-sponsored projects, the sponsor shall pursue restitution for errors and omissions from their consultant. The sponsor needs to be informed at the earliest possible date of an error or omission that could increase their cost. In the event the error or omission results in costs for which the consultant is judged responsible, the Resident Engineer shall assure that the payment received is credited to the project.

Change Orders written to compensate the Contractor for correction of Consultant Engineering errors should be coded as NON-PARTICIPATING. In those cases where the Consultant is billed and payment is received, the Resident Engineer will assure that payment is credited against the project.

Extra Work

The Engineer may add extra work if necessary to satisfactorily complete the project. Extra work is documented on a Change Order. An agreed upon unit price for extra work is generally negotiated. If agreement cannot be reached on a price, the Resident Engineer has the option of establishing a price or may do the work on a Force Account basis. The Contractor may object and claim as to the method of pricing; but would bear the burden of proof that the price was unfair.

Force Account for extra work is most suitable where quantities and/or the nature of the work make it difficult to agree upon a price, or where the Contractor and the Engineer cannot agree on a price. The prime contractor is entitled to administrative fees per subsections 104.03 and 109.03 (7) for extra work performed by a subcontractor. This is a one time fee regardless of the number of subcontractors.

Refusal to do extra work

In the event a contractor refuses to perform work proposed by the Engineer, the contractor should be asked to document this refusal and state the justification for refusal. Contact the Construction Section immediately as this may constitute breach of contract.

Utility Agreement Change Order

The ITD-00403, Utility Agreement Change Order, is used to make any change in the original utility agreement, or to facilitate utility work not covered by an agreement. These Change Orders are submitted to the Construction Section for processing in the same format as other Change Orders, except distribution will include the Utility Engineer. Refer to section 105.07 of this manual for a more thorough discussion of Utility and Railroad Agreement Change Orders and other actions that may be required because of such Change Orders.

The Construction Section or higher authority will approve all utility Change Orders, except that the Chief Engineer will sign all Railroad Change Orders.

Utility Change Orders are to be numbered separately from Construction Change Orders. Begin with number 1 for each contract and number consecutively.

An ITD-02317 must also be completed for all Utility Change Orders. The Construction Section prepares the ITD-02317 if the Utility Engineer initiates the change. The District prepares the ITD-02317 if initiated in the District. Discussion with the Utility Engineer must be documented on the ITD-02317.

ITD-00400, Change Order Requirements

Change Order requirements are listed below:

• Main headings should be in all caps, underlined, and begin at the left margin line. When more than one heading applies, use all that apply. Nearly all Change Orders will have one of the following as a main heading:

CHANGE IN PLANS

CHANGE IN SPECIFICATIONS

MATERIALS LEFT ON HAND (In most cases this heading is followed by (NON-PARTICIPATING) on F.A. Project)

PRICE ADJUSTMENT OF CONTRACT ITEM

ENGINEERING ERROR

CLAIM SETTLEMENT

QUANTITY VARIANCE

CHANGE IN METHOD OF MEASUREMENT AND BASIS OF PAYMENT

• Secondary headings should also be in all caps, left margin oriented, and underlined. In most cases they will be one, or more, of the following:

ESTIMATED INCREASE IN CONTRACT ITEMS AT CONTRACT PRICES
ESTIMATED INCREASE IN CONTRACT ITEMS AT AGREED PRICES
ESTIMATED INCREASE IN CONTRACT ITEMS AT AGREED PRICES
ESTIMATED INCREASE IN CONTRACT ITEMS BY FORCE ACCOUNT
ESTIMATED DECREASE IN CONTRACT ITEMS AT CONTRACT PRICES
ESTIMATED DECREASE IN CONTRACT ITEMS AT STIPULATED PRICES
ESTIMATED DECREASE IN CONTRACT ITEMS AT AGREED PRICES
ESTIMATED DECREASE IN CONTRACT ITEMS BY FORCE ACCOUNT
ESTIMATE OF EXTRA WORK AT AGREED PRICES
ESTIMATE OF EXTRA WORK AT STIPULATED PRICES
ESTIMATE OF EXTRA WORK BY FORCE ACCOUNT

• Subheadings are used at the end of each secondary section. The subheading should be in upper and lower case and underlined and generally consists of the following:

Total Estimated Increase

Total Estimated Decrease

A subheading is also used at the end of the Change Order to show:

Net Estimated Increase or

Net Estimated Decrease

Examples 104.03-1 through 6

Examples of two (2) completed AVOs, two (2) ITD-00400s, an ITD-02317, and an ITD-00403 are on the following pages. All forms must be properly signed to be effective.

The most current electronic version of these forms is in Public Folders, Department Policies and Forms, ITD Forms and should be used whenever possible.

ITD-2055 04/02

IDAHO TRANSPORTATION DEPARTMENT AVOID VERBAL ORDER/SPEED LETTER



	THOID VENE		
TO:	MR. CONTRACTOR	FROM:	ELMER HARDWORKER
	ACME INC.		SH-13 City Limits to River
SUBJI	ECT/PROJECT NO. Replace Delineators	/ST-1234(567) Key	1234
existin	AGE: In accordance with section 104. ng delineators with new Type 1 and Type ndard Drawings G-3 (copy attached) and s	2 as marked in the	field. Material and work shall conform
Type	or conversation and agreement today, you delineators; \$17.93 each for an estimate se per section 104.03 of the ITD Specific	ted quantity of 27	Type 2 delineators; and Administrative
SIGNI	ED: ELMER HARDWORKER		DATE: <u>5/10/01</u>
REPL'	Y:		
SIGNI	ED: Mr. Contractor, Superintendent (signa	ature required to form	nalize change order) DATE: 5/10/01

ITD-2055 04/02

IDAHO TRANSPORTATION DEPARTMENT



AVOID VERBAL ORDER/SPEED LETTER								
TO:	MR. CONTRACTOR	FROM:	ELMER HARDWORKER					
	ACME INC.		SH-13 City Limits to River					
SUBJI	ECT/PROJECT NO. Remove Obstructions/S	ST-1234(567) Key	1234					
dis pos marke	AGE: In accordance with section 104.03 of se of a set of truck scales and concrete heady d in the field. The concrete shall be Class 30 shall be per section 203 of the ITD Specificat	vall, and fill a sept	cic tank with concrete, as directed and					
	or conversation and agreement on the subject will be no contract time adjustment.		e compensated by Force Account and					
SIGNI	ED: ELMER HARDWORKER		DATE: <u>5/10/01</u>					
REPL	Y:							
SIGNI	ED: Mr. Contractor, Superintendent (signatur	re required to formal	ize change order) DATE: <u>5/10/01</u>					

ITD - 400 8/01

CHANGE ORDER

See Contract Administration Manual Section 104.03

TO:	CENTRAL PAVING CO	Project No.:		CM-0100(114)
_		Location:	FIVE MILE CR	EEK PATHWAY
You are	e ordered to perform the following described work	Contract No.:	6368 Key No.:	5729
in acco	rdance with the Standard Specifications and	Authority No.:		T943870
	Provisions governing the above contract or as	C.O. No.:		2
-	amended. The cost to perform this work includes	Date of Contract	or Authorization	APRIL 27, 2001
	r, equipment, materials, overhead and all other		Sheet 1	
	tal costs associated with completing the work.		J	<u> </u>
morach	tar costs associated with completing the work.			
	DESCRIPTION	N OF WORK		
CHANG	E IN PLANS			
<u> </u>				
1.	Delete the Type 5-B fencing, Item 610-A5, and add an it			encing
	is called out in the contract plans as Item 610A on page 1	12 of 20 from Station 0+	74.77 104.8 ft left to	
	Station 7+12.31 18.11 ft left.			
2.	Materials used will meet contract specifications.			
	[]			
3.	Section 610 of the Standard Specifications and the Standard	ard Drawing F-2-A shal	l apply to all work	
	performed.			
4.	Quantities will be measured by linear foot.			
5.	ESTIMATED DECREASE IN CONTRACT ITEMS AT			
	610A5, Fence Type 5B	D' @ \$2.78/L.F/ ated Decrease	\$ 2,001.60 \$ 2,001.60	
		ated Decrease	\$ 2,001.00	
	ESTIMATED INCREASE IN CONTRACT ITEM AT A	GREED PRICES		
	C02610-A3, Pence Type 3B	720' @ \$4.08/LF		
	C02ADMIN, Administrative Costs per Section 104.03	1 CA @ \$100.00	•	
		ated Increase	\$ 3,037.60	
	Ne	t Estimated Increase	= \$ 1,036.00	
			, ,	
6.	This change order will not affect Contract Time.			
	(Stub bn ti	hid lipp)	 	
D., #000			a Changa Ordania ar	
-	son of this change, Contract time will		s Change Order is ap k detailed above and	
be auju	isted by.	shown.	k detailed above allo	the prices
	Working Days		RAL PAVING CO	
	NO CHANGE Calendar Days	Accepted. OLIVI	Contractor	
	To orixital pays	Ву:		
Appr	roved for:		ontractor Signature	Date
	City, County or Highway District	APPRO	VED FOR STATE OF IDA	но
Ву:		Ву:		
Бу. <u>-</u>			 	
	Title	-	Title	Date

ITD - 400 8/01

CHANGE ORDER

See Contract Administration Manual Section 104.03

TO:	Steelman-Duff, Inc.	Project No.:	STP-3782(101)	
		Location:	SH-69, Kuna to Amity	Rd
You ar	e ordered to perform the following described work	Contract No	.: 6339 Key No.:	5153
in acco	ordance with the Standard Specifications and	Authority No	o.: X933200	
Specia	I Provisions governing the above contract or as	C.O. No.:	37	
	amended. The cost to perform this work includes	Date of Con		ril 1, 2001
	or, equipment, materials, overhead and all other		Sheet 1	of <u>1</u>
incider	ital costs associated with completing the work.		1	
	DESCRIPTION	ON OF WORK		
QUA	NTITY VARIANCE			
1.	<u>Description:</u> This change order makes a price			
	quantity of Item 626L Traffic Control Mainter			
	designer, and in response to public comments	that resulted in	additional traffic control ma	aintenance.
2.	Material Requirements: There is no change to	material require	ments.	
3.	Construction Requirements: There is no change	ge to construction	n requirements.	
4.	Method of Measurement: There is no change	to method of me	asurement.	
5.	ESTIMATED INCREASE IN CONTRACT	TITEMS AT CO	NTRACT PRICE	
	626L Traffic Control Maintenance 5. Estimated Incr ESTIMATED INCREASE IN CONTRACT	ease	= \$ 17,32	25.00 25.00
	C37626L Traffic Countrol Maintenance 2		$@$ \$ \checkmark 41.37 = \$ 91,83	
6.	Contract Time: There is no change to contract	t time.		
	(Stub o	n this line)	 	
	son of this change, Contract time will usted by:	We agree that,	if this Change Order is appro- work detailed above and the	
	Working Days	Accepted:	Steelman-Duff, Inc	•
	No Change Calendar Days		Contractor	
		Ву:		
Appro	oved for:		Contractor Signature	Date
	City, County or Highway District	AF	PPROVED FOR STATE OF IDAHO	
Ву:		Ву:	· · · · · · · · · · · · · · · · · · ·	
	Title Date		Title	Date

ITD - 2317 6/01

RECORD OF CHANGE ORDER AUTHORIZATION



Date: _		June 18, 2001	Project No.:	 	STP-3782(101)	
Contra	ctor:	Steelman Duff	Key No.:	5153	C.O. No.:	37
Reg. E	ngr.:	Scott T. Gurnsey, P.E.	Location:	SH-6	69, Kuna to Amity F	Rd
Reque	sted By:	Region 4			Sheet 1	Of 1
OUAN 1. 2. 3. 4. 5. Date of Date of Date of Discussion of Discussion of Discussion of Date of Discussion of Dis	quantity of It the designer, maintenance. Material Req Construction Method of MESTIMATE 626L ESTIMATE C37626L	This change order makes a prime tem 626L Traffic Control Main and also in response to public uirements: There is no change Requirements: There is no change Requirements: There is no change Traffic Control Maintenants DINCREASE IN CONTRATE Traffic Control Maintenants Estimated In Control Maintenants April 1, 2001 April 2, 2001	intenance. Thi ic comments the	s increase in at resulted requirement truction requirement of measure AT CONT OO AT AGRENHR @ ated Increasest. change Adjustment N X	s due to underest in additional transtate. tts. quirements. EMACT PRICE = \$ ED PRICES \$ 41.37 = \$ Approval by:	17.325.00 17.325.00 91,831.06
			ivaliie.		(Signature)	
Chang Distrib		the Construction Engineer by: Construction Dist.	3 Engr. F	<u>June</u> Regional	e 19, 2001 Gurnsey	RD
מוווט	DRI	Other:	Eligi. F	.cgionai	Juilisey	IND

ITD 00403 (Rev. 6/01)

UTILITY AGREEMENT CHANGE ORDER

(See Contract Administration Manual Section 104.03 and 105.07)

Project No.:	NH-F-5121(019)	Work Auth. Code:	P871250
Key No.:			UTILITY # 1
	Wrenco Loop to Dover		
	6313		1
	PG&E Gas Transmission – Northwest		
	e the herein described changes from the pl estimate of your utility agreement with the		the following work not included
Change request	ted by Ken Sorenson, Sandpoint Regiona	ll Engineer	
	of additional work to be done, materials rec s, estimate, and explanation furnished by the		cost to be paid by the State.
CHANGE IN PL	ANS	1	
PG&E Gas Tran	The work of this Change Order will include is smission lines at Station 1319+50 from the casing out to the new right of way.	e all cost to extend and eir current location at th	relocate the vents over the ne old highway right of way at
Materials:	Materials will be provided by PG&E Gas	ransmission and will m	eet their specifications.
Construction R	equirements: Work will be performed by	V PG&E Gas Transmiss	ion forces to their standards.
Method of Meas PG&E Gas Tran Basis of Payme	ismission.		ment basis as invoiced by
ESTIMATE OF	EXTRA WORK AT AGREED PRICES		
Item X01PGE	PG&E Vent Move 1CA @ \$10,000.0		
Time: This Ch	ange Order does not affect Contract time.		
if this proposal is detailed above a	gned utility company, hereby agree that sapproved, we will perform the work and accept payment at the prices shown the terms of	IDAHO TRANSPORTA	TION DEPARTMENT ACTION:
	ement, except as herein provided.	Ken Sorenson	
			Submitted By
Accepted:		Sandpoint Resident E	Engineer
	Utility Company		Title
Ву:			
NOTE: THE CL	Signature		Authorized Representative
	inge Order is not effective until approved	Construction Engine	er

Example 104.03-7(1)

SAMPLE AGREEMENT

STATE/LOCAL AGREEMENT

(CONSTRUCTION)

PA	RT	Ί	ES

	THIS	AGRI	EEMENT	is n	nade	and	enter	red :	into	thi	s /		(day
of _											tween			
TRANS	PORT	OITA	1 DEPA	RTME1	VT , 1	herea	after	cal	led	the	STATE	and	the	>,
actir	ıg by	and	throug	gh it	:s >,	, her	eafte	er ca	alled	the	e SPON	SOR.		

PURPOSE

The SPONSOR has requested the STATE to program a project for federal participation in the costs of constructing >, to consist of >, which has been designated as Project No. >. This agreement sets out the responsibilities of the parties in the construction and maintenance of the project.

The Parties agree as follows:

SECTION I.

- 1. This Agreement is entered into for the purpose of complying with certain provisions of the Federal-Aid Highway Act in obtaining federal participation in the construction of the project.
- 2. Federal participation in the costs of the project will be governed by the applicable sections of Title 23, U.S. Code (Highways) and rules and regulations prescribed or promulgated by the Federal Highway Administration.

SECTION II. That the STATE will:

- 1. Not guarantee that federal funds herein sought are available or will be made available. In the event federal funds are unavailable, this Agreement is void.
- 2. Enter into an Agreement with the Federal Highway Administration covering the federal government's pro rata share of construction costs.
- 3. Advertise, open bids, prepare a contract estimate of cost based on the successful low bid and notify the **SPONSOR** thereof.
- 4. Award a contract for construction of the project, based on the successful low bid, if it does not exceed the **STATE'S** estimate of cost of construction by more than ten (10)

Example 104.03-7(2)

percent.

- 5. Obtain concurrence of the **SPONSOR** before awarding the contract if the **SPONSOR'S** share of the low bid amount exceeds the amount set forth in Section III, Paragraph 1 by more than ten (10) percent.
- 6. Provide to the **SPONSOR** sufficient copies of the Contract Proposal, Notice to Contractors, and approved construction plans.
- 7. Designate a resident engineer and other personnel, as the STATE deems necessary, to supervise and inspect construction in accordance with the plans, specifications and estimates in the manner required by applicable state and federal regulations. This engineer or his authorized representatives, will prepare all monthly and final contract estimates and change orders, and submit all change orders to the SPONSOR for their concurrence. If the SPONSOR'S share of any change order exceeds \$1,000.00, the STATE will submit a statement to the SPONSOR indicating the amount owed by the SPONSOR.
- 8. Maintain complete accounts of all project funds received and disbursed, which accounting will determine the final project costs.
- 9. Upon completion of the project, after all costs have been accumulated and the final voucher paid by the Federal Highway Administration, provide a statement to the SPONSOR summarizing the estimated and actual costs, indicating an adjustment for or against the SPONSOR. Any excess funds transmitted by the SPONSOR and not required for the project will be returned.
- 10. Indemnify, save harmless and defend regardless of outcome the SPONSOR from the expenses of and against suits, actions, claims or losses of every kind, nature and description, including costs, expenses and attorney fees that may be incurred by reason of any act or omission, neglect or misconduct of the STATE in the construction of the work which is the subject of this Agreement.

SECTION III. That the SPONSOR will:

1. Pay to the STATE before the advertisement for bids, the amount of > AND NO HUNDREDTHS DOLLARS (\$), which is the SPONSOR'S estimated share of the cost for construction plus preliminary and construction engineering by the STATE, and after deducting credit for the SPONSOR'S previous deposit of \$> as applies to Preliminary Engineering. The actual cost to the SPONSOR will be determined from the total quantities

06/11/02 25

Example 104.03-7(3)

- obtained by measurement plus the actual cost of engineering and contingencies required to complete the work.
- 2. Upon approval of the lowest qualified bid received, if the SPONSOR'S share exceeds the amount set forth in Section III, Paragraph 1, transmit to the STATE the SPONSOR'S portion of such excess cost.
- 3. Authorize the **STATE** to administer the project and make any necessary changes and decisions within the general scope of the plans and specifications. Prior approval of the **SPONSOR** will be obtained if it is necessary, during the life of the construction contract, to deviate from the plans and specifications to such a degree that the costs will be increased or the nature of the completed work will be significantly changed.
- 4. The SPONSOR will designate an authorized representative to act on the SPONSOR'S behalf regarding action on change orders. That authorized representative's name is Phone
- 5. When change orders are submitted by the STATE for approval pursuant to Section II, Paragraph 7, the SPONSOR or its authorized representative shall give approval of same as soon as possible, but no later than ten (10) calendar days after receipt of the change order. If approval is delayed, any claims due to that delay shall be the responsibility of the SPONSOR.
- 6. Upon receipt of either of the statements referred to in Section II, Paragraphs 7 and 9, indicating an adjustment in cost against the SPONSOR, promptly remit to the STATE a check or warrant in that amount.
- or warrant in that amount.

 7. Maintain the project upon completion to the satisfaction of the STATE. Such maintenance includes, but is not limited to, preservation of the entire roadway surface, shoulders, roadside cut and fill slopes, drainage structures, and such traffic control devices as are necessary for its safe and efficient utilization. Failure to maintain the project in a satisfactory manner will jeopardize the future allotment of federal aid highway funds for projects within the SPONSOR'S jurisdiction.
- 8. Comply with Appendix A, Title 49 CFR, Part 21, attached hereto and made a part hereof.
- 9. Indemnify, save harmless and defend regardless of outcome the **STATE** from the expenses of and against suits, actions, claims or losses of every kind, nature and description, including costs, expenses and attorney fees that may be incurred by

Example 104.03-7(4)

reason of any act or omission, neglect or misconduct of the SPONSOR or its consultant in the design, construction, and maintenance of the work which is the subject of this Agreement.

SECTION IV.

- 1. All information, regulatory and warning signs, payement or other markings, traffic signals required, the cost of which is not provided for in the plans and estimates, must be erected at the sole expense of the SPONSOR upon the completion of the project.
- 2. The location, form and character of all signs, markings and signals installed on the project, initially or in the future, shall be in conformity with the Manual of Uniform Traffic Control Devices as adopted by the STATE.
- 3. The use and occupancy of the right of way of this project by utility facilities will be controlled by the STATE'S Policy for the Accommodation of Utilities Within Rights-of-Way of the Federal-aid Systems in the State of Idaho.

SECTION V.

1. That this State/Iocal Agreement (Construction) upon its execution by both Parties, supplements the State/Local Agreement (Project Development) by and between the same parties, dated > on Project No. >.

EXECUTION

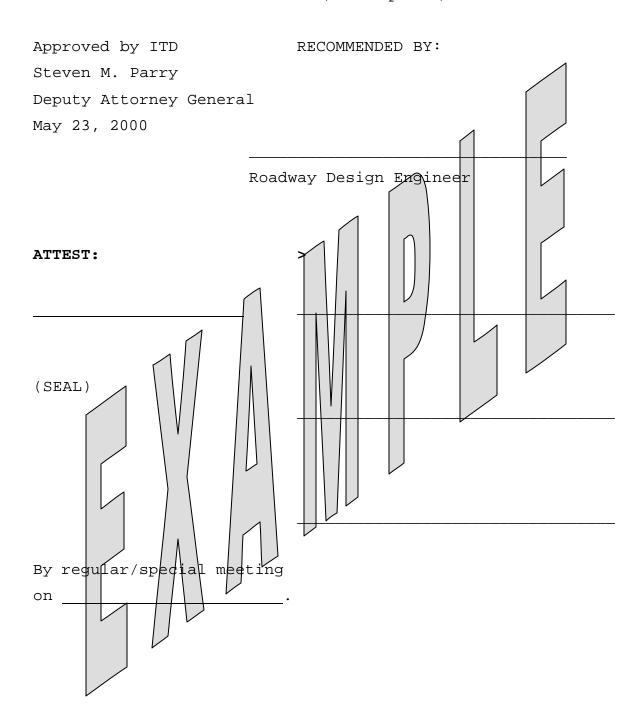
This Agreement is executed for the STATE by its Assistant Chief Engineer (Development), and executed for the SPONSOR by the >, attested to by the >, with the imprinted corporate seal of the >.

IDAHO TRANSPORTATION DEPARTMENT

APPROVED BY:

Example 104.03-7(5)

Assistant Chief Engineer (Development)



104.04 DIFFERING SITE CONDITIONS (CHANGED CONDITIONS)

When differing site conditions are encountered and the Contractor has followed the procedures previously discussed, a change order must be prepared to cover equitable adjustment in costs and time.

Type 1 Differing Site Condition

"During the progress of work, if subsurface or latent (hidden) physical conditions are encountered a the site differing materially from those in the contract..."

This type of site condition is a particular kind of circumstantial change that involves an existing condition at the site of work that materially differs from the conditions represented in the contract (specification and plans) documents, **not what was anticipated by either the department or the Contractor**. In highway construction most differing site conditions involve subsurface materials such as soil, rock, groundwater, underground facilities, and debris. The Contractor must prove that actual site conditions encountered differ materially (or significantly) from what the Idaho Transportation Department represented. To determine the merits of a Type 1 Differing Site Condition, the Resident/Regional Engineer must first determine what was actually represented in the contract documents. The project plans, as built plans from previous projects, soils reports and boring data, and any other documents that were available to the Contractor at the time of bidding must all be reviewed. At this stage the Resident/Regional Engineer is trying to ascertain what the department represented at the time of bidding. If the department did not provide any site information, then no Type 1 Differing Site Condition exists because no conditions were represented to begin with.

Determining if the contract documents do indicate that conditions encountered differ materially from representations made by the contract is the most difficult step because there is no widely accepted definition of what is materially different. Usually only conditions that significantly change how the Contractor should have performed the work are considered materially different. The Resident/Regional Engineer should consult with experts in the construction industry who are experienced in the type of work under issue and with ITD is own in-house experts.

If the conditions are determined to be materially different, then the Resident/Regional Engineer must next determine if reliance on the site information provided by the department is justified. Disclaimers and other contract language can sometimes negate reliance on site conditions provided in the contract documents. A site visit by the Contractor or the Contractor's past experience on similar projects may also negate reliance. If reliance was justified, then the contractor may be able to recover.

Type 2 Differing Site Condition

When the department is silent on what conditions exist at the site of work, then a differing site condition exists only when "...unknown physical conditions of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in the work provided for in the contract, are encountered at the site..."

This is a much broader test of a differing site condition and applies to industry practices in general. For example, if a Contractor is installing pipe and the department provides no soils information on the pipe run, then the Contractor must deal with whatever soil type and groundwater conditions are encountered at the site. If the Contractor expected firm clay and encounters loose, running sand, there is no relief since loose, running sand is not an unusual condition in pipe work. However, if the Contractor uncovered an old railroad line in the middle of a desert, then some relief would be available to the Contractor since old railroad lines are not normally encountered in pipe work.

The department must not withhold any information it has on site conditions to inquiring Contractors. In cases in which the department does not fully know the site conditions, Contractors must adequately determine their risk and bid accordingly.

Whether the condition encounter fits a Type 1 or Type 2 Differing Site Condition, **prompt written** notification must be given, by the party discovering the differing site condition, to the Resident/Regional Engineer. The Resident/Regional Engineer must **promptly** investigate the conditions and must **promptly** notify the Contractor in writing of the determination as to if a differing site condition exists. If a differing site condition exists the contract is adjusted accordingly by change order.

If the Contractor disagrees with the decision issued, the Contractor has the right to pursue a construction claim under section 105.17.

104.05 MAINTENANCE OF TRAFFIC

The Contractor must accommodate traffic either on the roadway through the construction site or on approved temporary detours.

Adequate accommodation of traffic shall be interpreted as satisfied when the following conditions are met:

- A. Dust control is provided.
- B. Sufficient width of roadway is provided to safely accommodate the traffic volume.
- C. A surface of reasonable smoothness is provided that will not result in vehicle or tire damage.
- D. The roadway has adequate horizontal and vertical alignment features to safely accommodate traffic.
- E. Proper and sufficient traffic control devices (i.e., adequate delineation and/or channelization) are employed to guide motorists safely day and night.
- F. The roadside is reasonably free of unnecessary obstacles that are not properly protected. Equipment and materials shall be placed behind guardrail or stored at least thirty feet (30') from the travelway and, preferably, much further to minimize errant vehicle collisions.

Dust Abatement Expense

During construction of highways where traffic is carried partially or wholly through the construction area or on detours (either special or temporary), the use of dust abatement water or dust palliative is vital to the safety of the public and will be paid for at State expense. Dust abatement will also be at State expense when it is necessary to protect crops or when it is applied for the health and comfort of people residing near the project. On projects where traffic is composed entirely of the Contractor's equipment with no impact to the general public, water or dust palliative for dust abatement will be at the Contractor's expense.

Contract Requested Detours

The specifications allow the Contractor, when authorized, to bypass traffic over detours constructed and maintained by the Contractor in lieu of carrying traffic through the construction areas. The Contractor is responsible for construction and maintenance cost of detours. However, if it can be shown that the detour can affect substantial savings to the State in project costs, it may be appropriate to revise the specifications by change order allowing the Contractor payment for items other than traffic control. Evaluation of environmental impacts to assure that all regulatory requirements are met is necessary when considering detour requests.

104.06 MAINTENANCE OF PUBLIC HAUL ROADS

The Contractor shall maintain public highways and streets over which materials for the contract are hauled. Hauling over the State Highway System is not normally a problem, however, hauling over locally administered roads and streets can result in rapid deterioration of these facilities, due to their marginal structural capacities. The specifications require the Contractor to restore such public haul roads to a condition equal to that which existed prior to when hauling started. Typical questions that arise when the local road/street agency demands repair of their facilities are as follows:

What exactly was the condition of the facility prior to the Contractor's hauling operation?

Did other heavy loads contribute to the deterioration?

What constitutes restoration to an *equally-as-good* condition?

The Contractor should be encouraged to meet with the local road officials prior to hauling to discuss these points. State personnel should take a series of photographs of the roadway before and after hauling.